

Handout

Nocipathy and Acupuncture: A Pilot Study on Patients with Lower Back Pain

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Note. This handout includes only the slides of the ‚treatment evaluation study‘-part of the paper.

Method

Table 1:

Sample description

Complaints:	Lower back pain
Sample size:	$n = 82$
Gender:	74.4% women
Age:	$M = 47.85$ years ($SD = 13.90$)
Number of treatment sessions:	$M = 13.75$ ($SD = 2.45$)
Chronic complaints (> 6 months):	84.1%
Prior therapies for same complaints:	93.9%

- All patients were treated with nocipathy combined with acupuncture by the presenting author at his general practice between Jan. 2002 and Dec. 2003.

Method

Table 2:

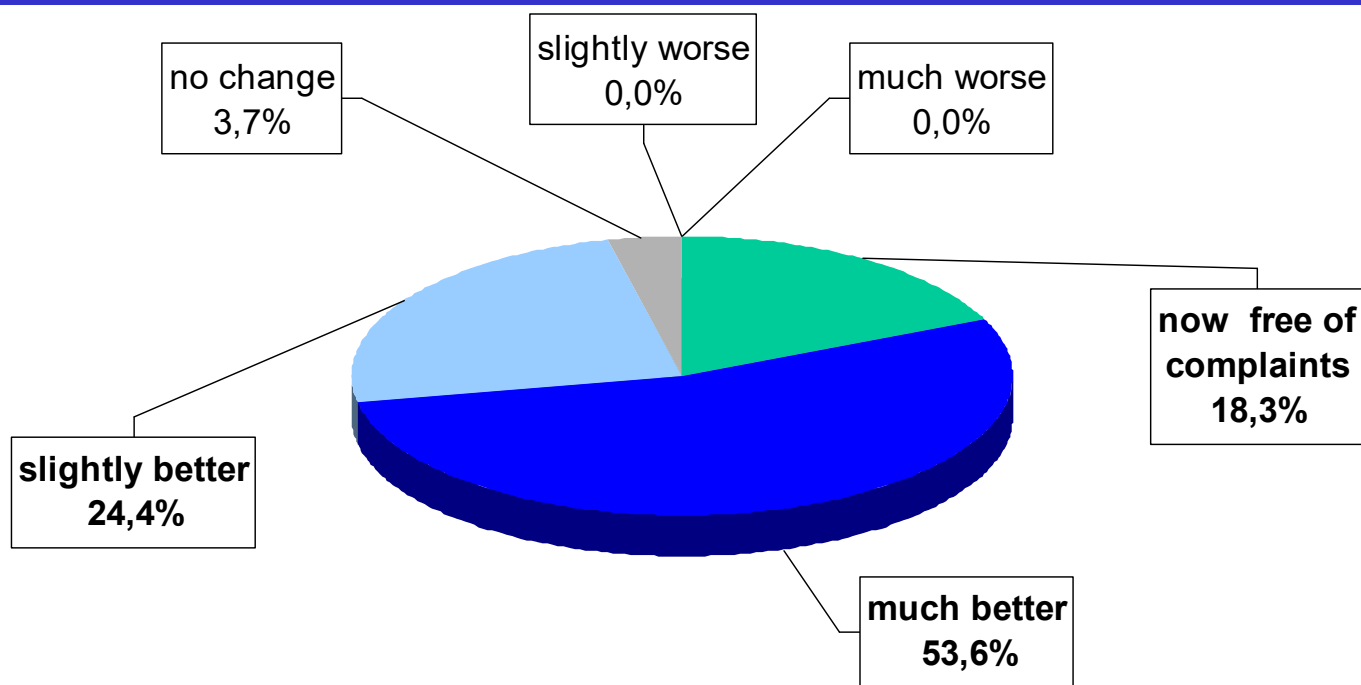
List of outcome measures

Measure	Time of measurement
Pain intensity (verbal rating scale)	pre / post
Frequency of complaints (verbal rating scale)	pre / post
Health Related Quality of Life (HRQoL / SF-36)	pre / post
Global rating of change in complaints (verbal rating scale)	posttest only

- **Measures were combined in a single questionnaire.**
- **Questionnaires were anonymously answered by patients at the beginning and approx. 4 weeks after the end of the treatment.**

Results

Fig. 1: Global rating of change in complaints (in comparison to the beginning of the treatment; $n = 82$)



- 96.3% of all patients reported an improvement in this self rating;
- 71.9% reported large improvements (→ ‚much better‘ + ‚free of complaints‘).

Results

Verbal rating scales measuring ...

Painfulness of primary complaints

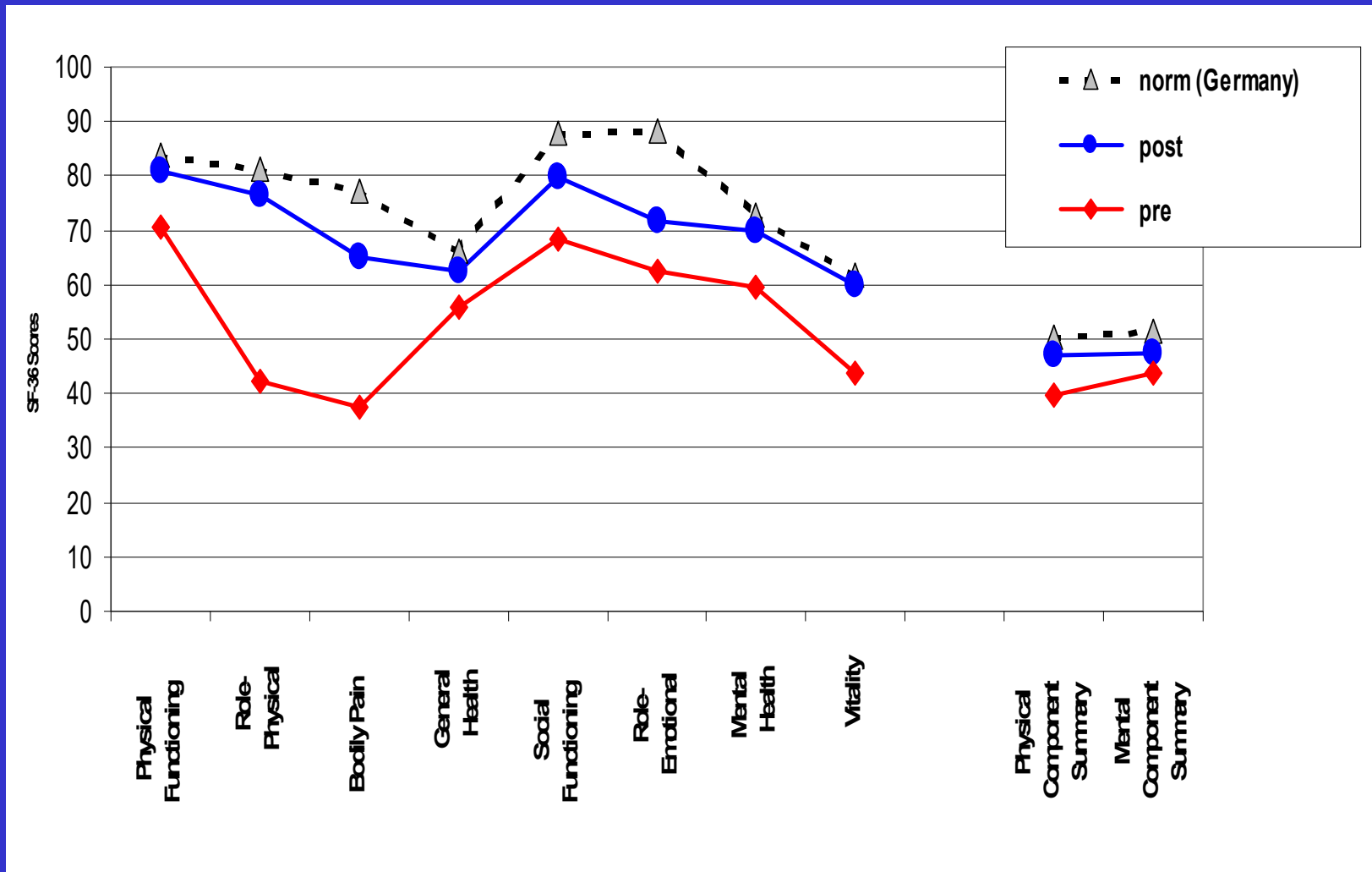
- **75.0% of patients reported a lower pain intensity after the treatment than at the beginning of treatment.**
- **Change in pain intensity ratings was highly significant (Wilcoxon-test: $Z = -6.33$, $p < 0.001$).**

Frequency of primary complaints:

- **70.1% of patients reported a lower frequency of complaints after the treatment than at the beginning of treatment.**
- **Change in frequency of complaints ratings was highly significant (Wilcoxon-test: $Z = -5.79$, $p < 0.001$).**

Results

Fig. 2: Improvements in Health Related Quality of Life (HRQoL / SF-36)



Results

Table 3:

Statistical significances and effect sizes of improvements in HRQoL (SF-36)

SF-36 (scales and summary measures)	Significance [†] of improvement	Effect size [‡]
Physical Functioning	$p < 0.001$	0.46
Role Functioning - physical	$p < 0.001$	<u>0.87</u>
Bodily Pain	$p < 0.001$	<u>1.51</u>
General Health	$p < 0.001$	0.34
Social Functioning	$p < 0.001$	0.44
Role Functioning - emotional	$p < 0.05$	0.23
Mental Health	$p < 0.001$	0.56
Vitality	$p < 0.001$	<u>0.88</u>
Physical Component Summary (PCS)	$p < 0.001$	0.72
Mental Component Summary (MCS)	$p < 0.01$	0.33

Note. [†] Repeated measures *t*-tests (2-sided); number of pairs $n = 56$ to $n = 81$ depending on number of missing values. [‡] Effect size computed as $M_{post} - M_{pre} / SD_{pre}$. Medium effect sizes are printed in blue, large effect sizes are printed in blue and underlined.

- Significant to highly significant improvements on all SF-36 scales;
- large effect sizes for 'Bodily pain', 'Physical Role Functioning' and 'Vitality';
- medium effect sizes for 'Physical Component Summary' and 'Mental Health'.

Discussion

POSITIVE RESULTS:

- **Results indicate nocipathy combined with acupuncture as a promising treatment option for patients with (chronic) lower back pain.**
- **Results closely match results obtained with a different *NAPS*-sample of patients with heterogeneous pain related complaints (published 2003 in the *German Journal of Acupuncture & Related Techniques*).**

LIMITATIONS:

- **Design of pilot study limits interpretations (e.g., lack of control group and single therapist).**

CONCLUSION:

- **Further studies using more powerful designs are justified and needed (e.g. inclusion of control groups, multicenter approach etc).**
- **Cooperation with clinical institutions desirable.**